

TWO NEW SPECIES OF *NOTELAEA* VENT. (OLEACEAE) FROM SOUTH-EASTERN QUEENSLAND

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Summary

The new species *Notelaea pungens* and *N. lloydii* are described and illustrated.

During a collecting trip to the Barakula State Forest in November 1981, I collected fruiting material of a species of *Notelaea* which was unknown to me. Later examination of this material revealed that it represented a new species. However, I required flowering material to complete the study. This material has recently been obtained through the generous assistance of Mrs Val Hando of Chinchilla and enables the species to be formally described.

The second *Notelaea* species described in this paper was brought to my attention by Mr L.H. Bird of Bundamba who first collected material of it in 1981. Subsequent collections by him and examination of populations in the field have confirmed that it, too, is a new species.

Floral descriptions of the two new species are based on material preserved in spirit.

***Notelaea pungens* Guymer, sp. nov.** affinis *N. linearis* Benth. sed foliis brevioribus pungentibus (1.1-3.2 cm longis), inflorescentiis 1-floribus et pedicellis brevioribus (0.5-0.6 mm longis) differt. **Typus:** Queensland, Darling Downs District: Percy Grant Road, Barakula State Forest, 15 Jun 1985, *V. Hando* 378 (holo: BRI; iso: BRI, CANB, MEL, NSW).

Compact small bushy shrubs 15-60 cm high. Branchlets puberulent with erect simple hairs, glabrescent. Leaves glabrous except for basal part of midrib above and petioles; lamina coriaceous, lanceolate, acute, slightly punctate above, less so below, 1.1-3.2 cm long, 4-5 mm wide; margin entire, thickened and slightly recurved; apex aristate; base attenuate into petiole; venation obscure above and below, visible with lens, lateral veins 7-9 pairs; petiole sparsely puberulent, to 1 mm long. Inflorescences axillary, 1 (or 2) per axil, metaxymonads, 2-3 mm long; axes puberulent; bracts 4-8, decussate; ovate, puberulent outside, margins ciliolate, persistent, 0.4-0.6 mm long. Flowers very pale green to pale yellow; pedicels sparsely puberulent, articulate at base, 0.5-0.6 mm long. Sepals semi-elliptic, apex acute, sparsely puberulent, margins ciliolate, 0.6-0.8 mm long. Corolla induplicate-valvate in bud, 4(-5)-lobed; lobes ovate, concave, usually in pairs, 1.9-2.5 mm long, 0.9-1.1 mm wide, joined above the base of filaments for 0.3-0.5 mm, margins ciliolate. Stamens 2, glabrous, enclosed within the concave corolla lobes; filaments 0.4-0.6 mm long with a broad connective and small terminal umbo; anthers 1.2-1.3 mm long, 1.1-1.2 mm wide. Ovary glabrous, 1-1.6 mm long at anthesis; style 0.3-0.4 mm long; stigma cream, 2-lobed, 0.3-0.4 mm long. Drupe globular to ovoid, dark blue, 7-10 mm long, 5-9 mm diameter; mesocarp 1-1.2 mm thick; endocarp crustaceous, 0.1-0.25 mm thick. **Fig. 1.**

Specimens examined. Queensland, DARLING DOWNS DISTRICT: N side of Big Break, between Barakula Office and Bollon Office, 2 km E of Burncluth road, Barakula State Forest, Mar 1985, *Ballingall* 1756 (BRI); Percy Grant road, Barakula State Forest, Mar 1985, *Ballingall* 1757 (BRI), June 1985, *Hando* 378 (BRI, CANB, MEL, NSW); 2 km S of Percy Grant Road, 26°23'S, 150°45'E, Barakula State Forest, May 1986, *Ballingall* 2202 (BRI); Mothers Day patch [26°24'S, 150°45'E], Barakula State Forest, Nov 1981, *Guymer* 1630 (BRI).

Distribution: *N. pungens* is known only from a small area within Barakula State Forest, north of Chinchilla.

Ecology: The species occurs in open eucalypt forests of *E. watsoniana* F.Muell. and *E. panda* S.T.Blake on soils derived from sandstone.

Flowering period: May to July.

Fruiting period: November to March.

Notes: *N. pungens* will key to *N. linearis* in Green's (1968) revision of *Notelaea* and in the Flora of South-eastern Queensland (Stanley & Ross 1986) but differs in its 1-flowered inflorescences, short pedicels (0.4–0.5 mm long) and pungent leaves.

Conservation status: The species is assessed as restricted and vulnerable (2V) using the risk coding of Leigh, Briggs and Hartley (1981).

Etymology: Named from the Latin *pungens* in reference to the sharp-pointed leaves.

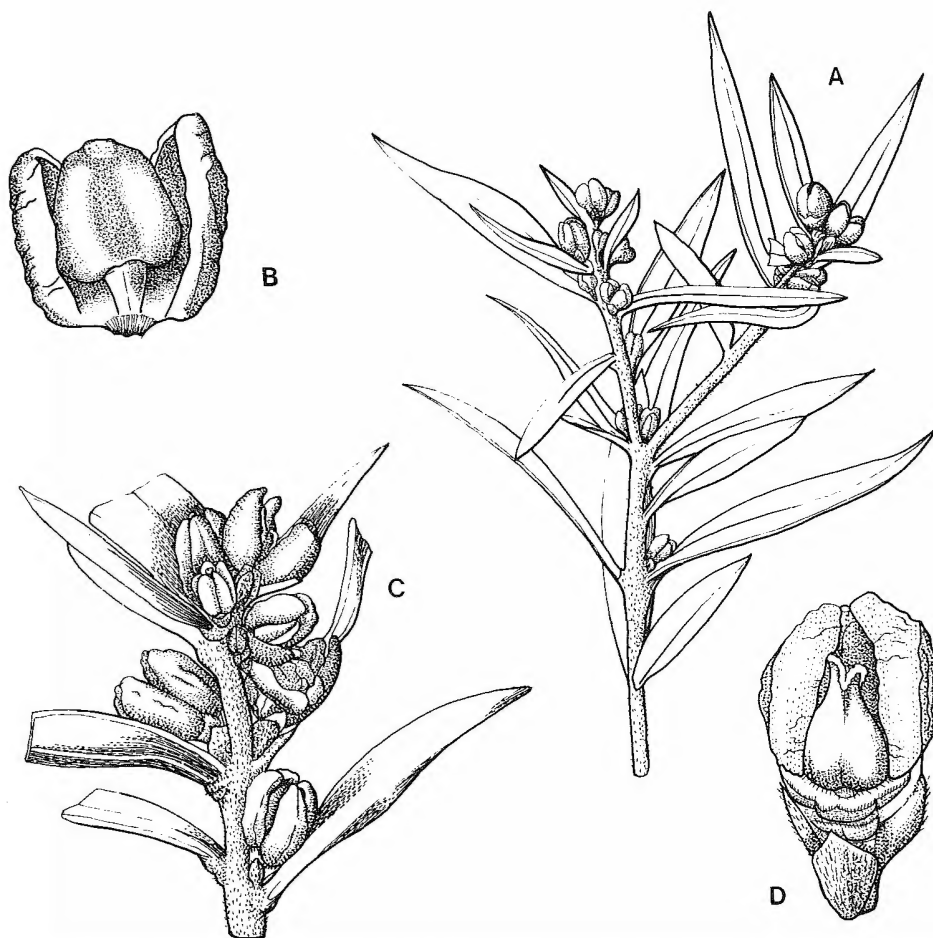


Fig. 1. *Notelaea pungens*: A. flowering branchlet $\times 3$; B. stamen and two corolla lobes $\times 12$. C. inflorescence $\times 6$. D. flower with front two corolla lobes removed showing ovary $\times 12$. All from Hando 378.

Notelaea lloydii Guymer, sp. nov. affinis *N. microcarpa* R.Br. sed foliis perangustis verruculosis, inflorescentiis 5–9 floribus et habitu multicauli differt. **Typus:** Queensland, Moreton District: End of Bunya Street, off Mt Crosby road, 13.8 km W of Kenmore P.O., Jul 1985, G.P. Guymer 1990 (holo: BRI; iso: AD,BRI,CANB,DNA,K,L,MEL,MO,NSW,PERTH).

Multistemmed shrubs, 1–3(–4) m high; stems 2–4 cm diameter; bark pale grey, smooth. Branchlets puberulent with erect simple hairs, glabrescent. Leaves glabrous except puberulent base; lamina coriaceous, linear, slightly falcate, punctate above and below, 7–14 cm long, 2–5.5 mm wide (length:width ratio 30–72:1); margin entire, slightly raised and recurved; apex acute; base very narrowly cuneate, decurrent into petiole; venation distinct and raised above, obscure and flush below, lateral veins 9–12 pairs; petioles puberulent, 1–2 mm long. Juvenile leaves linear, 6–15 cm long, 1–2 mm wide. Inflorescences axillary, 1 or 2 per axil, metabotryoids, 5–9-flowered, 5–10 mm long; axes puberulent, sometimes glabrous apically; upper bracts ovate or lanceolate, caducous, sparsely puberulent outside, glabrous inside, 0.8–1.2 mm long, basal pair ovate-acute, puberulent outside, persistent, 1–1.5 mm long. Flowers pale yellow or cream; pedicels glabrous or sparsely puberulent, articulate at base, 3–5 mm long. Sepals glabrous or ciliate at apex, triangular, apex acute or rounded, 0.2–0.6 mm long, 0.4–0.8 mm wide. Corolla induplicate-valvate in bud, 4-lobed; lobes ovate, concave, 0.9–2.2 mm long, 0.9–1 mm wide, joined in pairs above base of filament for 0.4–0.6 mm, glabrous. Stamens 2, glabrous, enclosed within the concave corolla lobes; filaments 0.1–0.2 mm long with a blunt terminal umbo; anthers 1.1–1.5 mm long, 1.3–1.4 mm wide. Ovary glabrous, 0.7–1 mm long at anthesis; style 0.1–0.15 mm long; stigma pink, 2-lobed, 0.25–0.35 mm long. Drupe globular to ovoid, dark blue, 6–8 mm long, 5–8 mm diameter; mesocarp 1–1.5 mm thick; endocarp woody, 0.3–0.4 mm thick. **Fig. 2.**

Specimens examined. Queensland. MORETON DISTRICT: Banks of Brisbane R., near Karana Downs, Jul 1981, Bird AQ348158 (BRI); Cliffs above Brisbane R., near Karana Downs, Jun 1981, Bird AQ348213 (BRI); Mt Crosby road, opposite Bunya St, Jul 1985, Guymer 1987 & Self (BRI), Self & Dillewaard s.n. (BRI,NE,NSW); end of Bunya St, off Mt Crosby road, 13.8 km W of Kenmore, Jul 1985, Guymer 1990 (AD,BRI,CANB,DNA,K,L,MEL,MO,NSW,PERTH), Guymer 1989 & Self (BRI,CBG,MEL,NE), Guymer 1988 & Self (BRI, K), Self & Dillewaard (AD,BRI,QRS); Tyamolum Scout camp site, vicinity of Kholo Ck, Bunya St, Mt Crosby, Nov 1985, Bird s.n. (BRI,CANB,K,MEL,NE,NSW); Frenchs Ck road, ca 12 km SW of Boonah, Jul 1984, Bird AQ395662 (BRI).

Distribution: The species is known from the Mt Crosby area, on the western outskirts of the city of Brisbane and from the Boonah district, southwest of Brisbane.

Ecology: *N. lloydii* occurs in the ecotone between eucalypt open forests and vine thickets. The most common associated eucalypts are *E. crebra* F.Muell. and *E. maculata* Hook. with associated trees and shrubs of *Brachychiton populneus* (Schott & Endl.) R.Br., *Alphitonia excelsa* R.Br., *Acacia aulacocarpa* Cunn. ex Benth., *A. concurrens* Pedley, *A. falcata* Willd., and *Diospyros ferrea* (Willd.) Bakh. var. *geminata* (Willd.) Bakh.

Flowering period: June to early August.

Fruiting period: October to December.

Notes: *N. lloydii* will key to *N. microcarpa* in Green's (1968) revision of *Notelaea* and in the Flora of South-eastern Queensland (Stanley & Ross 1986) but can be distinguished from this species by its verruculose linear leaves, 5–9-flowered inflorescences and multistemmed habit.

Conservation status: The species is presently known from two locations sixty kilometres apart. The populations that occur on the Tyamolum Scout camp site and in Moggill State Forest (L.H.Bird, pers. comm.) are reasonably well protected from the encroaching urbanisation. However, *N. lloydii* is assessed as restricted and vulnerable (2V) using the risk coding of Leigh, Briggs and Hartley (1981) until further distributional data are obtained.

Etymology: Named in honour of Mr Lloyd Bird of Bundamba who drew my attention to the distinctiveness of this species. Mr Bird is an avid botanical collector who has provided numerous specimens of botanical importance for the Queensland Herbarium, including *N. lloydii*.

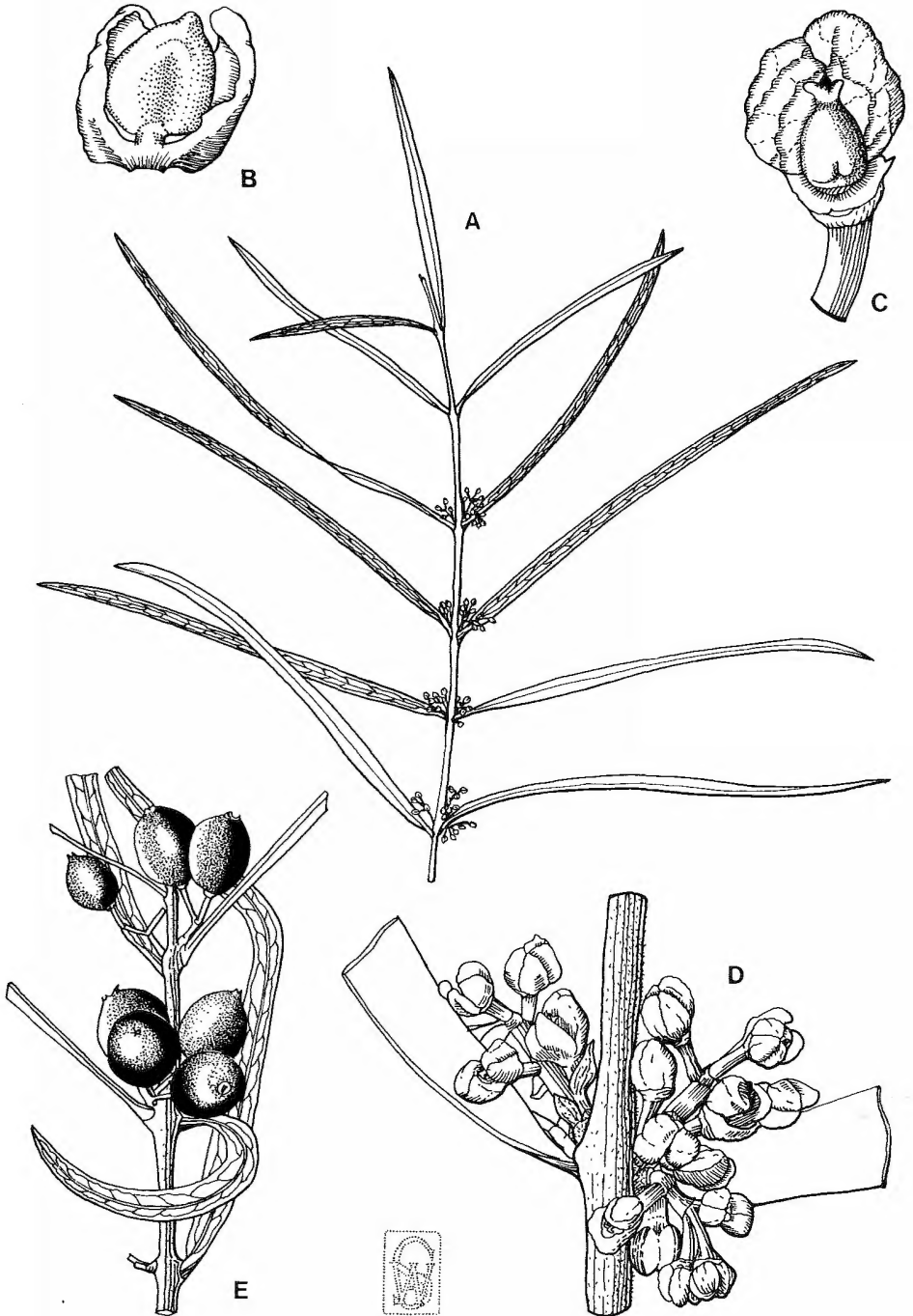


Fig. 2. *Notelaea lloydii*. A. flowering branchlet $\times 2/3$. B. stamen and two corolla lobes $\times 12$. C. flower with front two corolla lobes removed showing ovary $\times 12$. D. inflorescence $\times 4$. E. fruiting branchlet $\times 2$. A-D from Guymer 1990; E from Bird s.n. (Nov 1985).

Acknowledgments

The assistance of Mrs Val Hando in obtaining flowering and preserved material of *N. pungens* is gratefully acknowledged. I also wish to thank Mr Lloyd Bird for bringing *N. lloydii* to my attention and for discussion with him on its distribution. Mr Alan Self assisted with field work and Mr Will Smith drew the illustrations.

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